Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model, in order to associate to each of said geometric cells ~~comprising data defining~~ a specific geometric feature ~~with which it is associated~~, the method comprising:
receiving input comprising one or more constraints relating to geometric cell information;
for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine whether the cell meets the requirement of the constraint; and
generating a list of geometric cells meeting the requirements of the constraints.

2) (Previously Presented) The computer system operation method of claim 1, wherein at least one of said input constraints is selected from the group consisting of:
a) constraints relating to cell dimension;
b) constraints relating to the topology of a cell;
c) constraints relating to the history of the model evolution;
d) constraints relating to specific attributes of a cell; and
e) constraints relating to geometrical indications of a cell.

3) (Previously Presented) A CAD/CAM apparatus comprising:
an input device;
a central processing unit; and
a display device;
wherein the central processing unit runs an application program comprising code for:

displaying a representation of a model, said model comprising a plurality of geometric cells each comprising geometric cell identification data and data defining a geometric feature of the model that is associated with said geometric cell;

receiving input comprising one or more constraints relating to geometric cell information of the model;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint; and

generating a list of geometric cells meeting all of the requirements of the constraints.

4) (Previously Presented) The CAD/CAM apparatus of claim 3, wherein the application program processes at least one input constraint selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

5) (Previously Presented) A computer data signal embodied in a digital data stream comprising data representing the identity of one or more geometric cells of a model, each of said geometric cells comprising geometric cell identification data and data defining a geometric feature of the model that is associated with said geometric cell, and wherein said data stream is generated by a system operating according to a method comprising:

receiving input comprising one or more constraints relating to geometric cell information;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint; and

generating a list of cells meeting all of the requirements of the constraints.

6) (Previously Presented) The computer data signal embodied in a digital data stream of claim 5, wherein at least one of said input constraints is selected from the group consisting of::

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

7) (Currently Amended) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing a means for identifying geometric cells of a model, in order to associate to each of said geometric cells a geometric feature and said geometric cells comprising geometric cell identification data ~~and data defining a geometric feature of the model that is associated with said geometric cell~~, the method comprising:

receiving input comprising one or more constraints relating to geometric cell information;

for each constraint and for each of a plurality of geometric cells of a model, processing a declarative syntax specifying at least one of said received input constraints to determine which cells of the model meet the requirement of the constraint; and

generating a list of geometric cells meeting all of the requirements of the constraints.

8) (Previously Presented) Computer executable code stored on a computer readable medium according to claim 7, wherein at least one of said input constraints is selected from the group consisting of::

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

constraints relating to geometrical indications of a cell.

9) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model, in order to associate to each of said geometric cells a specific geometric feature and each of said geometric cells comprising geometric cell identification data ~~and data~~

~~defining a geometric feature of the model that is associated with said geometric cell~~, and the method comprising:

a) receiving input comprising one or more constraints relating to geometric cell information;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

10) (Previously Presented) The computer system operation method of claim 9, wherein at least one of the received input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

11) (Previously Presented) A CAD apparatus comprising:

an input device; and

a central processing unit;

wherein the central processing unit runs an application program comprising code for:

a) receiving input comprising one or more constraints relating to geometric cell information of a model;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the geometric cells of the model and retaining as a subset only the geometric cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of geometric cells and retaining in the subset only the geometric cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

12) (Previously Presented) The CAD apparatus of claim 11, wherein searching the geometric cells comprises searching by the application program based on at least one received input constraints selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

13) (Currently Amended) A computer data signal embodied in a digital data stream comprising data representing the identity of one or more geometric cells of a model, wherein said data stream is generated by a system operating according to a method comprising:

a) receiving input comprising one or more constraints relating to geometric cell information; wherein said geometric cells comprises geometric cell identification data; ~~and data defining a geometric feature of the model that is associated with said geometric cell~~

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

14) (Previously Presented) The computer data signal embodied in a digital data stream of claim 13, wherein at least one of the received input constraints is selected from the group consisting of::

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

15) (Currently Amended) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing a means for identifying geometric cells of a model in order to associate to each of said geometric cells a specific geometric feature, the method comprising:

a) receiving from a user an input comprising a script comprising one or more constraints relating to cell information;

b) selecting the first constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint;

c) based on the received script, searching the cells of the model and retaining as a subset only the cells that meet the requirement of the first constraint of said input;

d) selecting the next constraint of said input and identifying the components of the CAD system that must be accessed to find geometric cells meeting the requirements of said next constraint;

e) searching the subset of cells and retaining in the subset only the cells that meet the requirement of said next constraint of said input; and

f) repeating steps d) and e) for each of the remaining constraints in said input.

16) (Previously Presented) Computer executable code stored on a computer readable medium according to claim 15, wherein s at least one of the received input constraints is selected from the group consisting of::

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

17) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for specifying geometric cells of a model that a user wishes to be a target for ~~modification or manipulation~~association of a geometric feature, the method comprising specifying at least one constraints chosen from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell; and

selecting a plurality of geometric cells based on the specified at least one constraint;

based on the selected plurality of geometric cells, ~~identifying features of the model as a target for modification or manipulation; and~~

receiving input from a user to ~~effect a modification or manipulation of the selected~~ associate geometric features to said selected cells.

18) (Currently Amended) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for identifying geometric cells of a model meeting the requirement of one or more constraints of a cell descriptor in order to associate with each of said geometric cells a specific geometric feature, each of said geometric cells comprising geometric cell identification data ~~and data defining a geometric feature of the model that is associated with said geometric cell~~, the method comprising:

determining for each constraint of said cell descriptor those components of the CAD system that must be accessed to find geometric cells meeting the requirements of the constraint; and

identifying a list of geometric cells that meet the requirements of all of the constraints of said input.

19) (original) A computer system operation method for use with a CAD system in modeling objects, said method providing a means for defining three dimensional objects using a textual description, the method comprising:

receiving textual input specifying one or more pre-defined geometric parts, and the location and size of such parts;

generating geometric cell information for such parts;

receiving input comprising one or more constraints relating to the cell information of such parts;

for each constraint, determining whether the cells of such parts meet the requirements of the constraint; and

generating a list of cells meeting the requirements of the constraints.

20) (Previously Presented) The computer system operation method of claim 19, wherein at least one of the received input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

21) (original) Computer executable code stored on a computer readable medium, the code comprising means for causing a CAD computer system to perform a method providing means for defining three dimensional objects using a textual description, the method comprising:

receiving textual input specifying one or more pre-defined geometric parts, and the location and size of such parts;

generating geometric cell information for such parts;

receiving input comprising one or more constraints relating to the cell information of such parts;

for each constraint, determining whether the cells of such parts meet the requirements of the constraint; and

generating a list of cells meeting the requirements of the constraints.

22) (Previously Presented) Computer executable code stored on a computer readable medium according to claim 21, wherein at least one of the received input constraints is selected from the group consisting of:

a) constraints relating to cell dimension;

b) constraints relating to the topology of a cell;

c) constraints relating to the history of the model evolution;

d) constraints relating to specific attributes of a cell; and

e) constraints relating to geometrical indications of a cell.

23) (Currently Amended) A method of identifying geometric cells in a CAD/CAM system in order to associate to each of said geometric cells a specific geometric feature, the method comprising the following steps:

creating a set of scripting rules for describing one or more characteristics of geometrical cells in said CAD/CAM system;

receiving a user script input describing one or more characteristics of the geometrical cells to be identified, said user input using said set of scripting rules;

interpreting said user input for translating said described characteristics into one or more cell selecting commands;

selecting the cells that meet all the described characteristics, using said cell selecting commands.

24. (Currently Amended) The method of claim 1 further comprising:

automatically selecting previously associated geometric features of the model based on the generated list of cells; and

receiving a user input to execute a change to each of the automatically selected geometric features.

25. (Previously Added) The method of claim 1 wherein the declarative syntax comprises a scripting language program received as a CAD system user input.